

CLAIMS:

The following listing of claims replaces all prior versions.

What is claimed is:

1.(Original) A method for operating a communication system, comprising steps of

flexibly allocating Code Division Multiple Access (CDMA) channel resources between packet-switched shared channels and circuit-switched dedicated channels in order to optimize system throughput; and

employing a side channel as required to send all or a part of a total amount of data, depending on the total amount of the data.

2.(Previously Presented) A method as in claim 1, wherein a bandwidth allocation scheme allocates a set of CDMA channels for burst packet-switched channels, and where data is time division multiplexed over said set of CDMA channels providing a wide bandwidth data pipe for packet-switched-data, wherein subscriber stations are equipped with multiple CDMA channel receivers tuned to the burst packet-switched channels.

3.(Previously Presented) A synchronous Code Division Multiple Access (CDMA) communication system wherein a base site (BS) communicates with subscriber stations (SSs) through a radio channel, comprising:

a BS channel allocation control unit for allocating radio channel bandwidth to include a set of shared forward link CDMA channels for use as burst packet-switched channels, wherein data is time division multiplexed over the burst packet-switched channels to a plurality of said SSs;

further comprising multiple CDMA burst packet-switched channel receivers at individual ones of said plurality of SSs for receiving said data from said burst packet-switched channels,

said BS channel allocation control unit further allocating, as required, other CDMA channels for circuit-switched connections to particular ones of said SSs;

and further comprising a side CDMA channel for making channel requests and for sending all or a part of a total amount of data, depending on the total amount of the data.

4.(Original) A synchronous CDMA communication system as in claim 3, wherein for a SS that has data to transmit to the BS, the SS transmits an indication to the BS that the SS has data to be transmitted, along with the data.

5.(Previously Presented) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit further allocates a set of shared reverse link CDMA channels for use as reverse burst packet-switched channels that are used in a contention mode by a number of said SSs.

6.(Previously Presented) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit further allocates a set of shared reverse link CDMA channels for use as reverse burst packet-switched channels that are used in a slotted Aloha fashion by a number of said SSs.

7.(Previously Presented) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit further allocates a set of shared reverse link CDMA channels for use as reverse burst packet-switched channels, and wherein individual ones of said SSs further comprise multiple CDMA burst packet-switched channel transmitters that are used in a contention mode by a number of said SSs to transmit channel requests alone, channel requests along with data, or data alone to said BS.

8.(Previously Presented) A synchronous CDMA communication system as in claim 3, wherein at least two of said SSs are assigned to a same forward link data side channel, and where packet multiplexing is used to transmit data packets from the BS to individual ones of at least two of said SSs.

9.(Original) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit allocates said radio channel bandwidth under control of a network operator.

10.(Original) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit allocates said radio channel bandwidth automatically in response to demand.